

FIG. 2

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FIG. 2

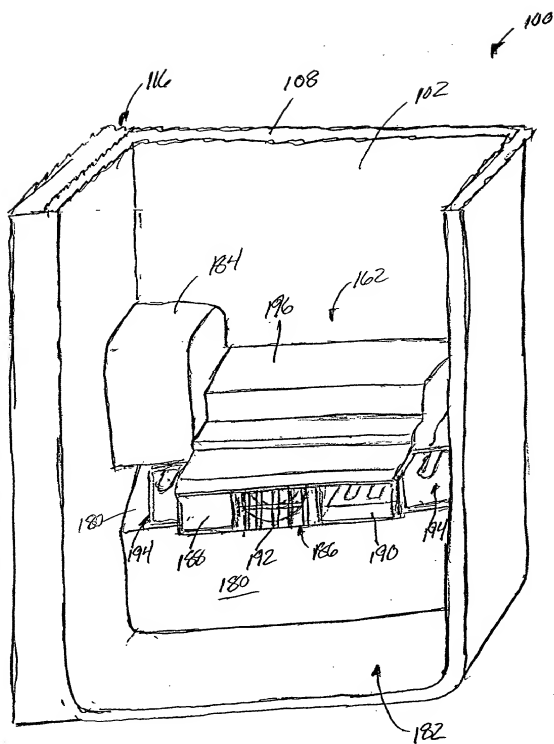


FIG. 3

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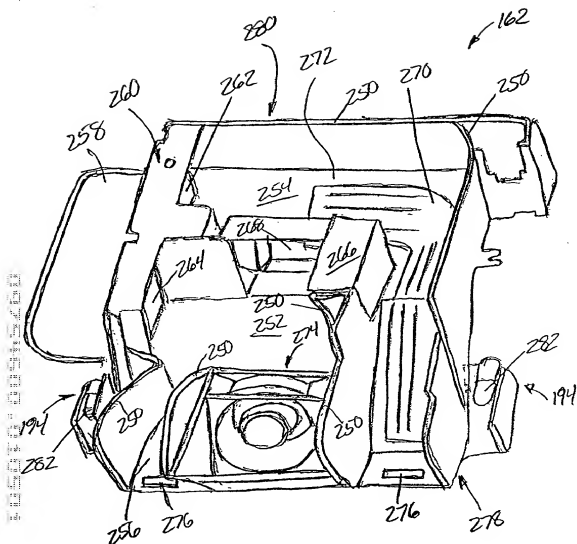


FIG. 4

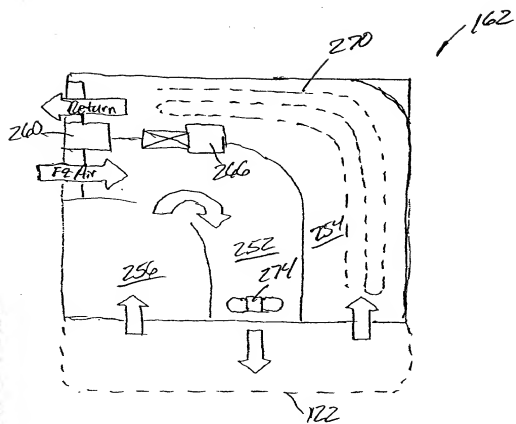


FIG. 5

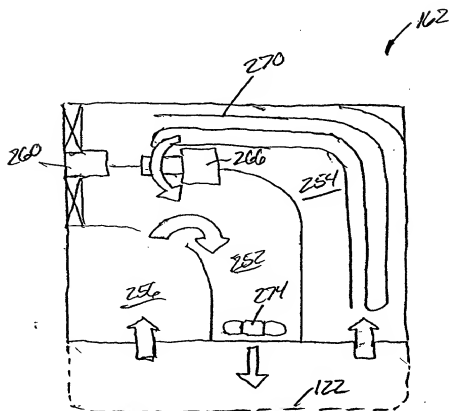


FIG. 10

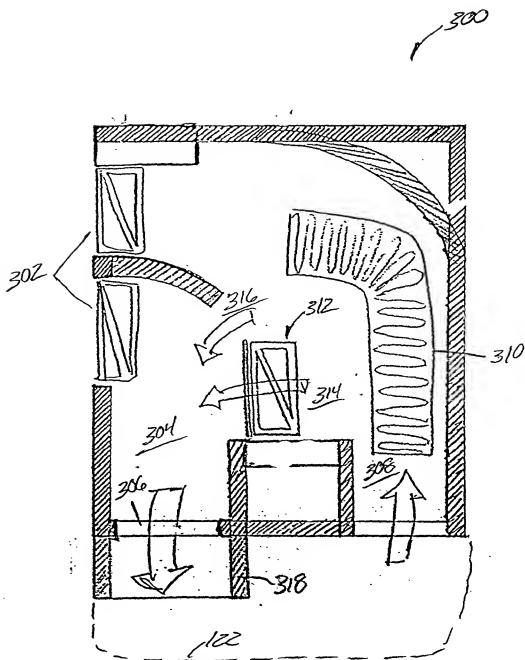
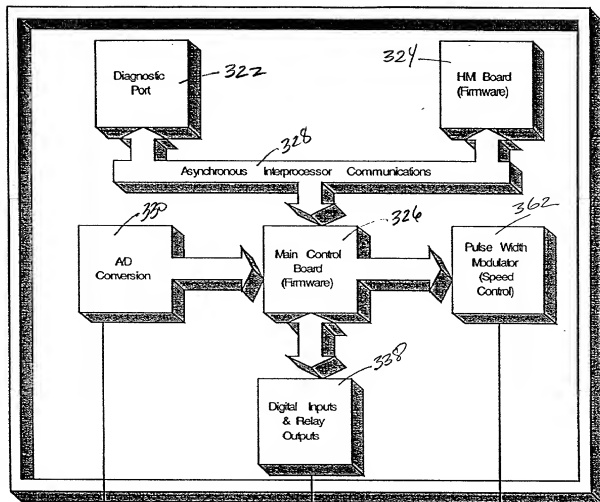


FIG. 7

320



- FF Temp 2 - 332
- FF Temp - 332
- Feature Pan Temp - 276
- FZ Temp - 334
- Evap. Temp - 336

- Cond. Fan Tach. - 340
- Evap. Fan Tach. - 342
- Crusher Solenoid - 344
- Auger Motor - 346
- Personality Inputs (Site Specific) - 348
- Water Dispenser Valve. - 350
- Encoders for Set Points - 352
- Compressor Ctrl - 354
- Defrost Heater - 356
- Door Detector - 358
- Muffin Damper - 360
- Feature Pan Damper 1 - 260
- Feature Pan Damper 2 - 266
- Feature Pan Heater - 270
- Condensor Fan - 364
- FF Fan - 366
- Evaporator Fan - 368
- Feature Pan Fan - 274

FIG. 8

320

378

390

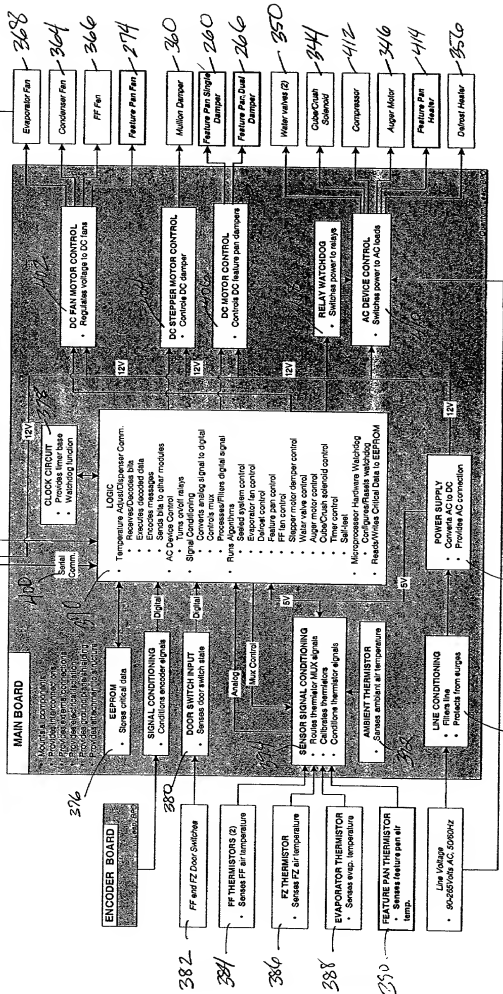


FIG. 9

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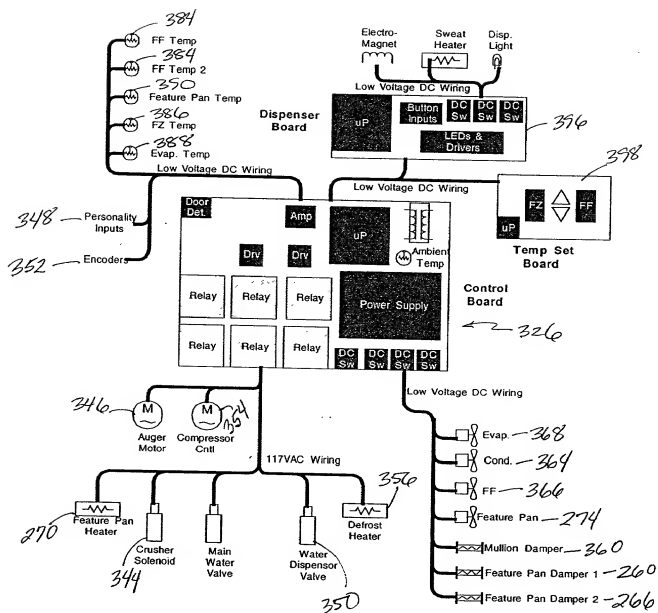


Fig 10

10/55

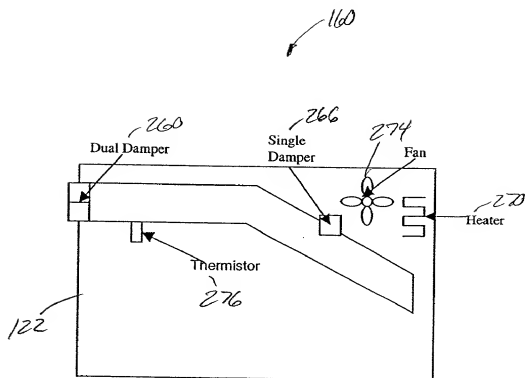


Fig. 11

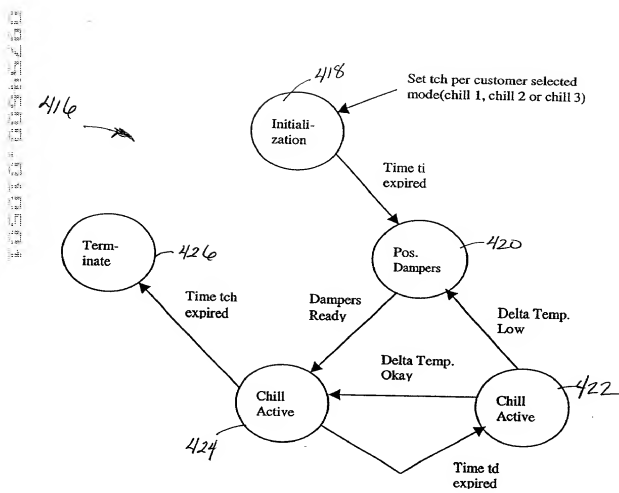
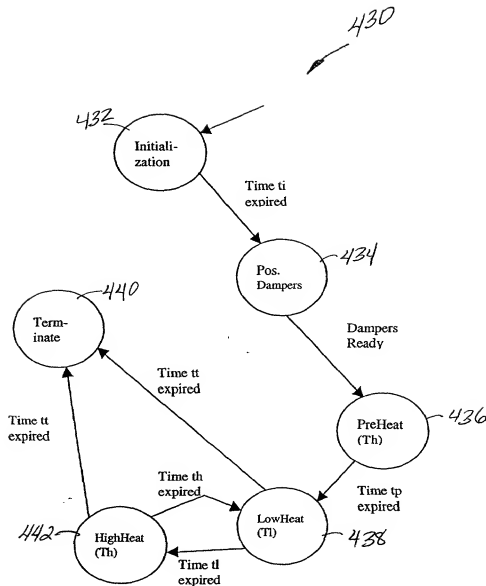


Fig. 12

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Initialization: Shuts off heater and turns on fan. This mode is implemented so that the customer interface LED that is wired in parallel with the fan will turn on as soon as the button is hit. Time t_i is the initialization time and will typically be approximately one minute.

Pos. Dampers: This state shuts off the fan, sets the single damper open then closes the dual damper. It then turns the fan back on. This is done for power management.

PreHeat: This state regulates the pan temperature

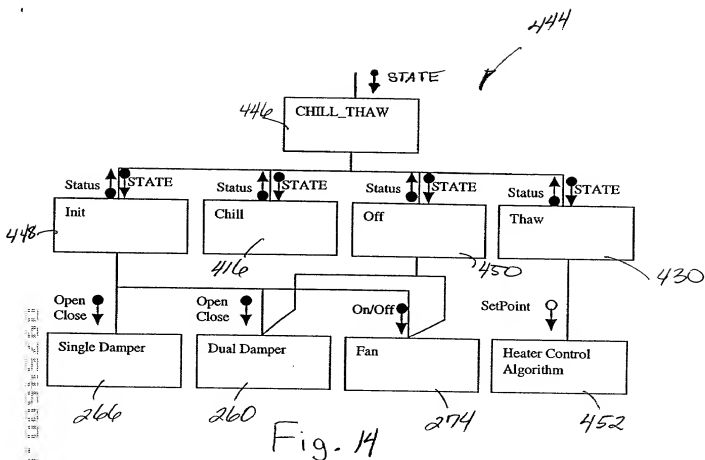
LowHeat

HighHeat:

Terminate: This mode closes both dampers and shuts off the fan then returns to idle.

Fig. 13

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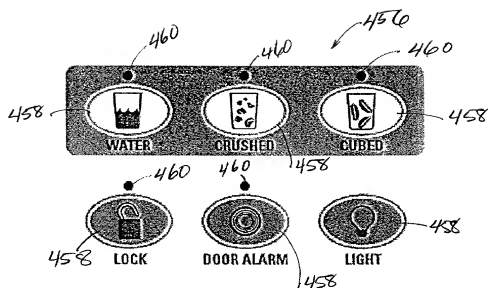


FIG. 15

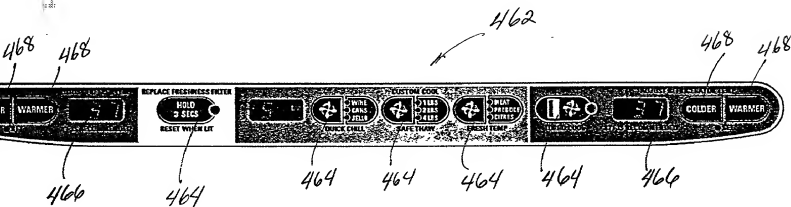


FIG. 16

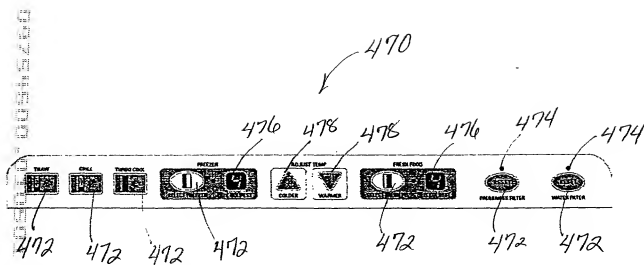
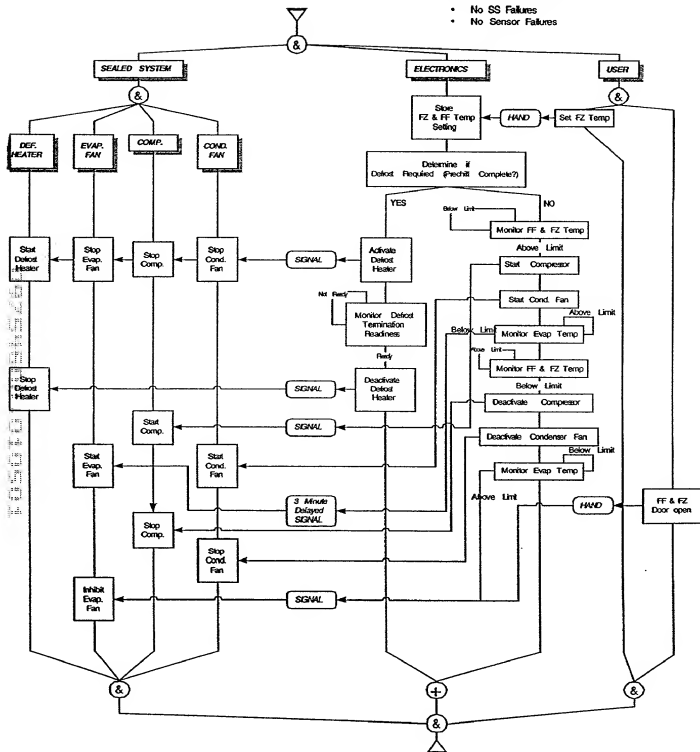


Figure 17.

Sealed System Assumptions:

- No SS Failures
- No Sensor Failures

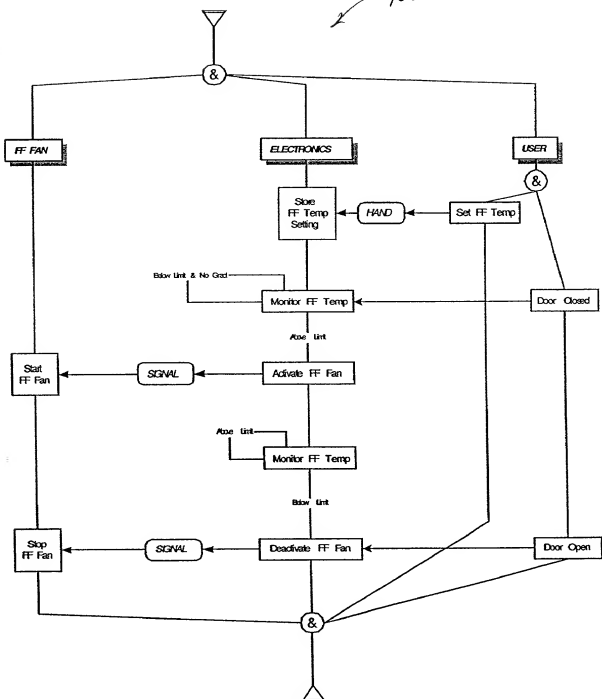


Sealed System Behavior Diagram

Fig 18

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Fresh Food Fan Behavior Diagram

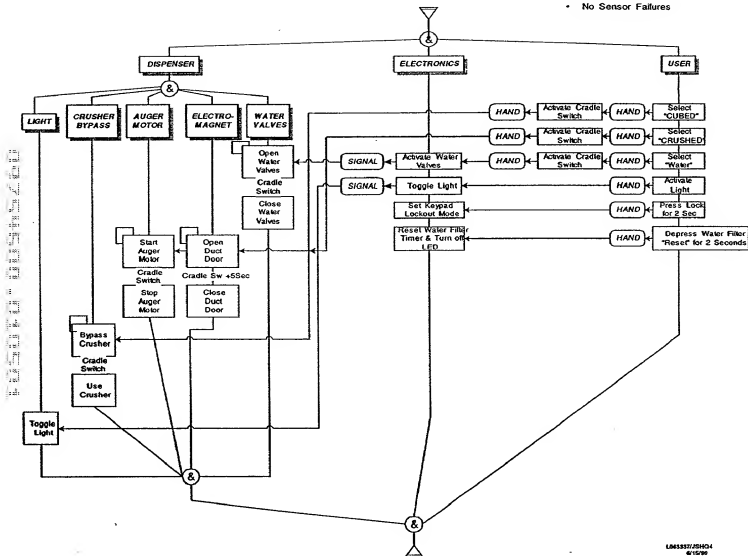
Fig 19

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Dispenser Assumptions:

- No Sensor Failures



LM63837/25H04
6/15/96

Dispenser Behavior

Fig 20

4/8/0

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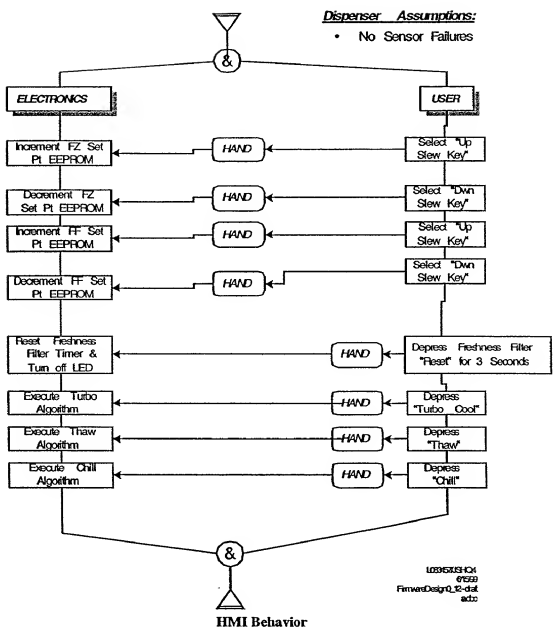
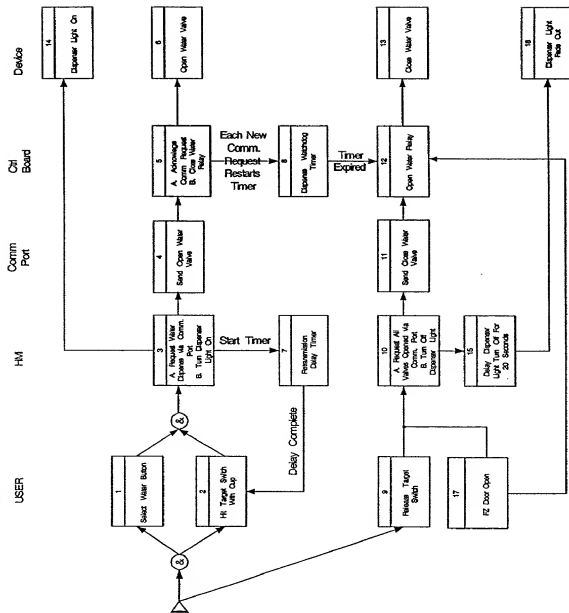


Fig 21

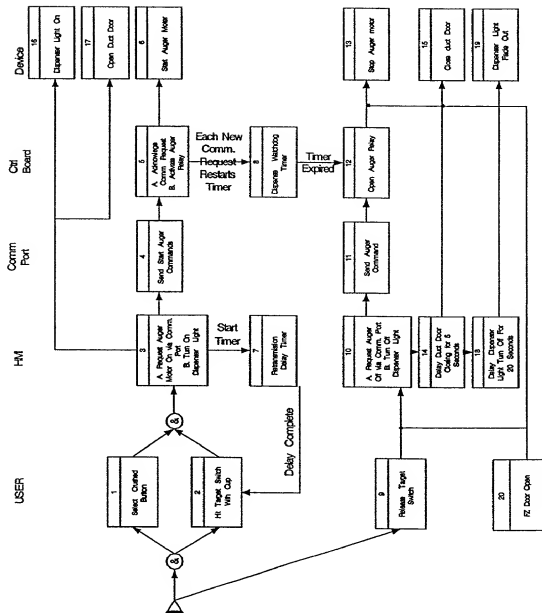
20/55

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Water Dispenser Interactions

Fig. 22

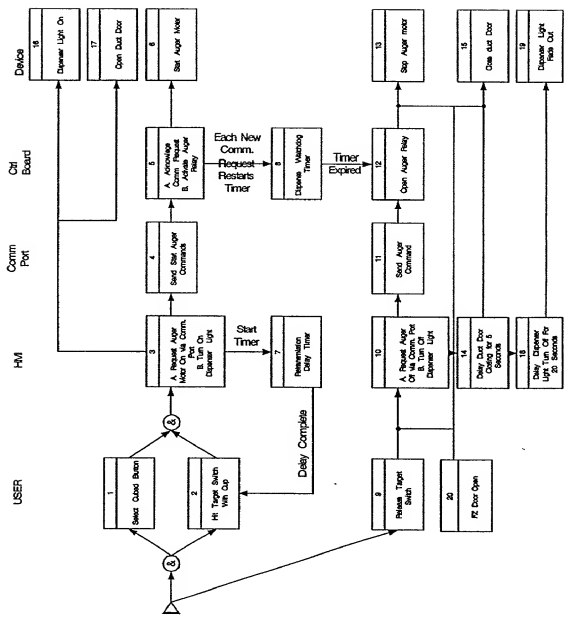


Crushed Ice Dispenser Interactions

Fig 23

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4/1/82

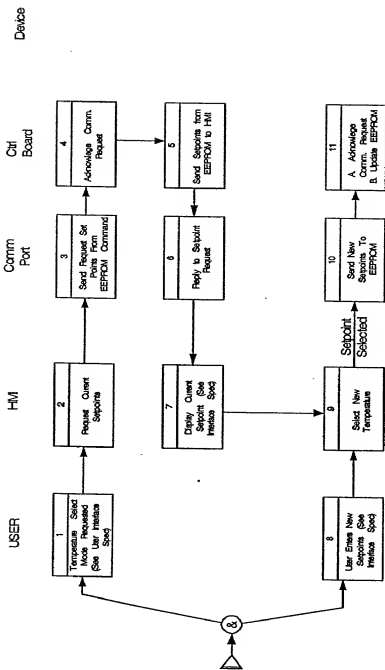


Cubed Ice Dispenser Interactions

Fig 24

35/82

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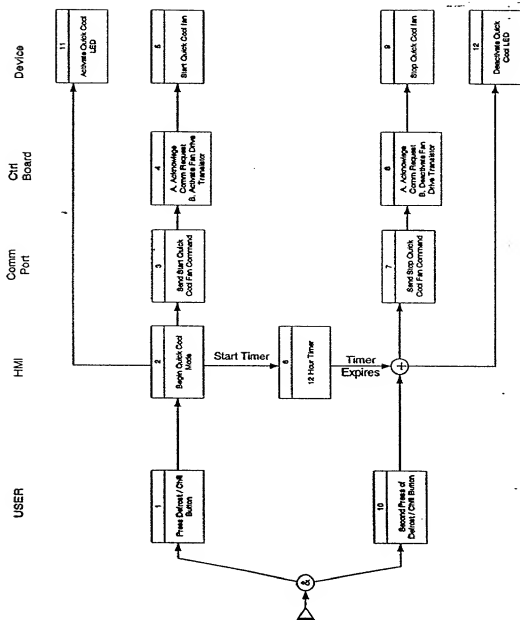


NOTE: Setpoint Selected Implies that the final selection has been made and that the selection has timed out.

Temperature Setting Interaction Diagrams

Fig 45

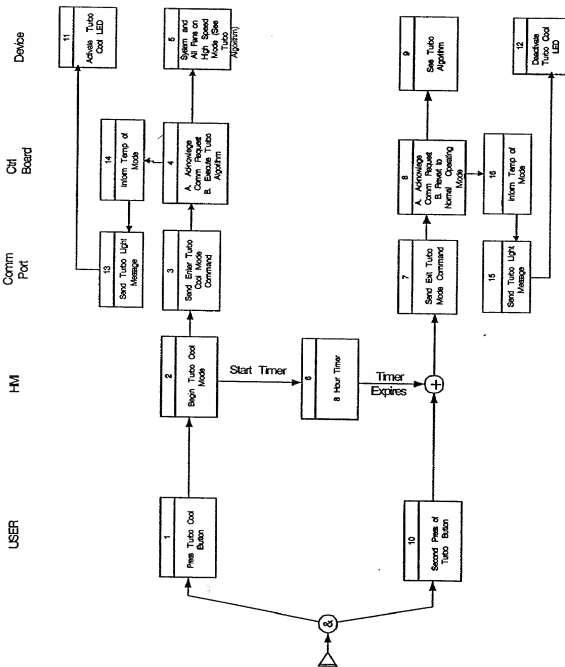
24/55



Quick Chill Interaction Diagram

F.9.26

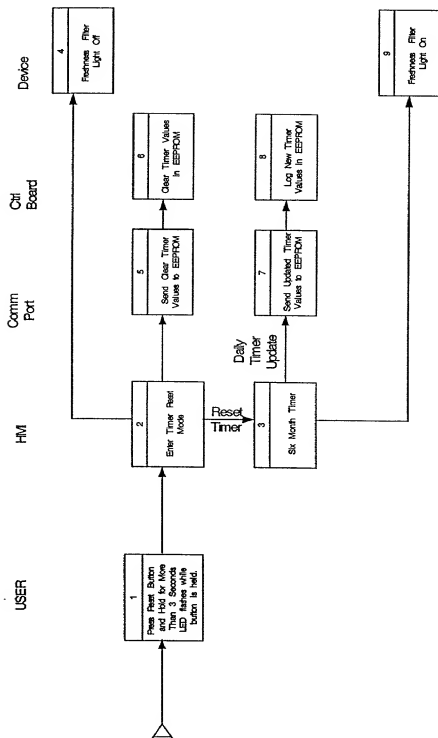
4498



Turbo Mode Interaction Diagram

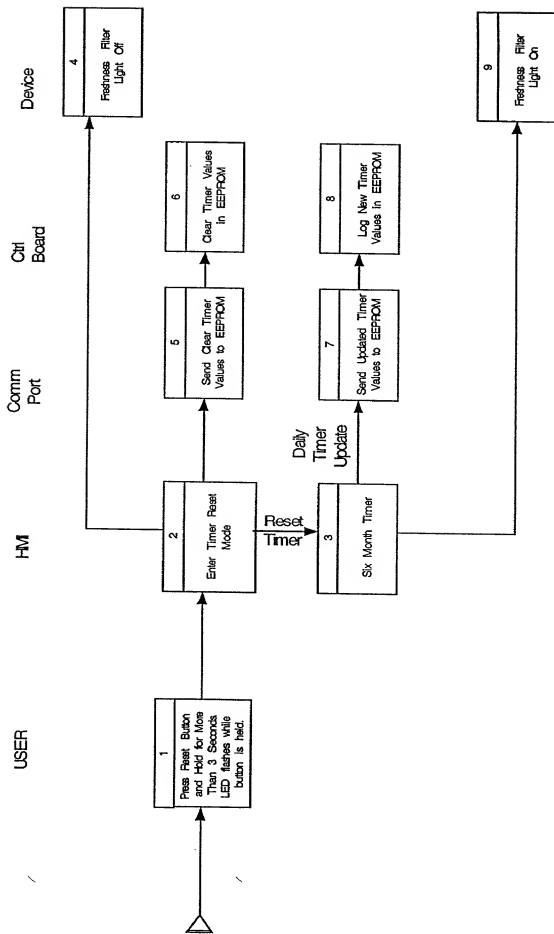
Fig 27

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Freshness Filter Reminder Interaction

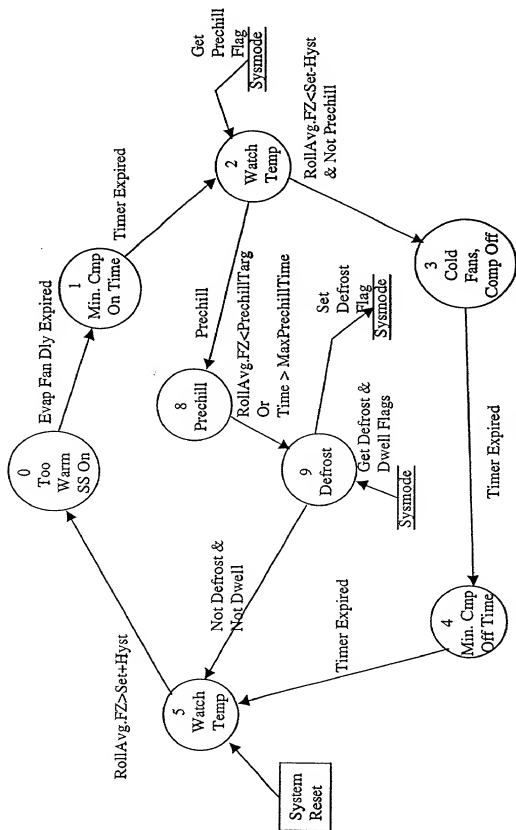
F-19 28



Water Filter Reminder Interaction

Feb 29

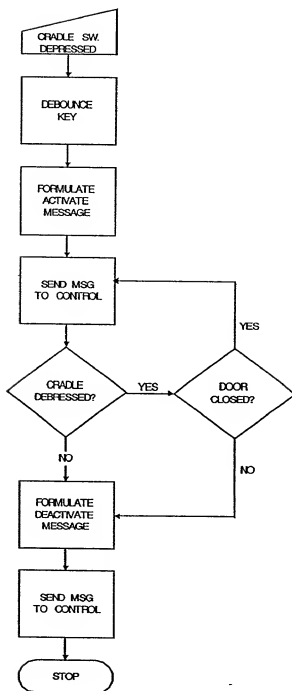
SS Algorithm



Sealed System Operational Algorithm

Fig 31

508



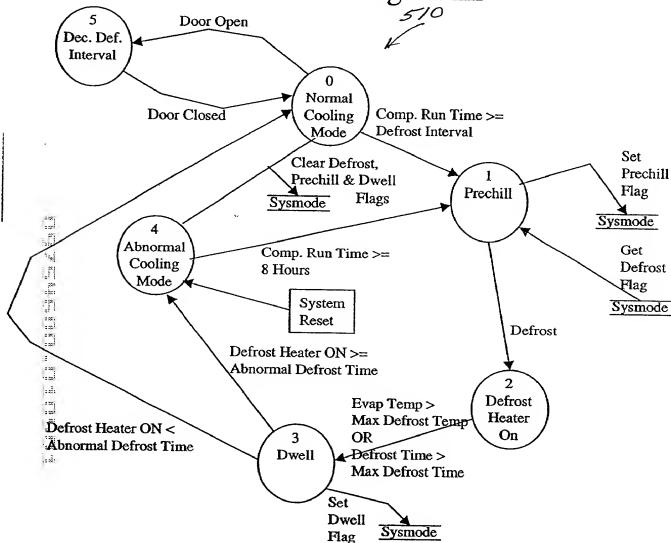
Dispenser Control Algorithm

Fig 32

31/55

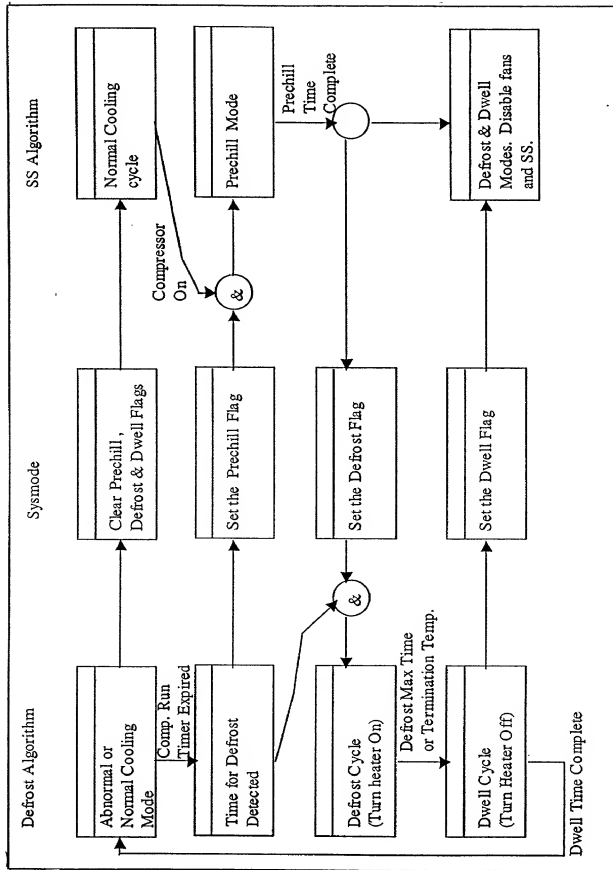
Defrost Algorithm

510

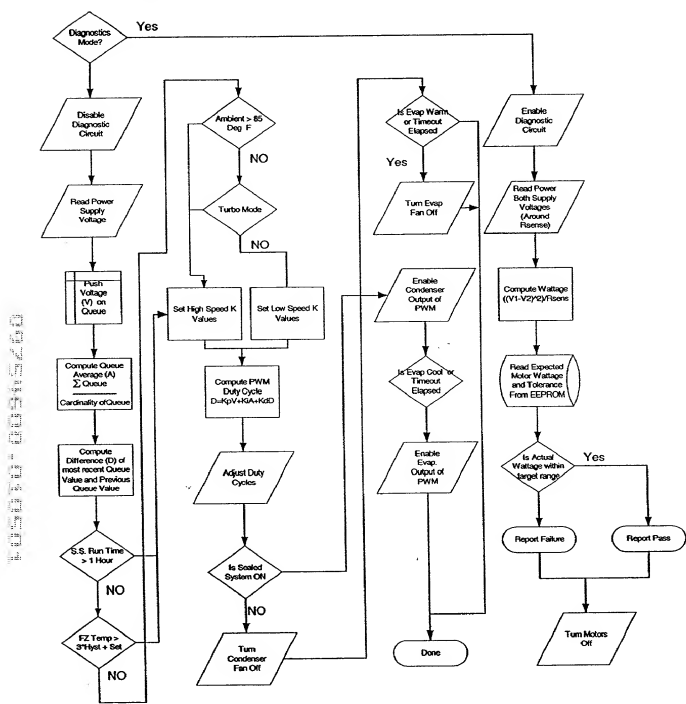


Defrost Control State Diagram

Fig 33



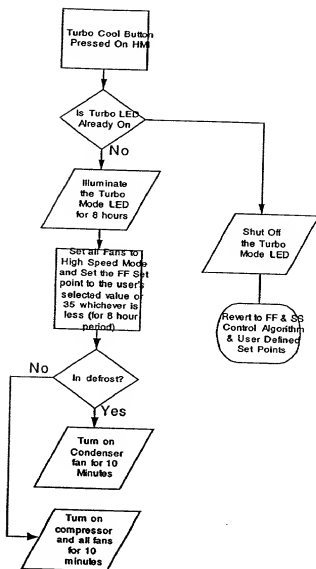
Evap. & Cond. Fan Control:



Fan Speed Control

- Notes:
1. The FF & Evaporator fans will shut off for the first five minutes that the door is open.
 2. Only one fan at a time can be on at a time during diagnostics.
 3. Once the fan has been switched to high speed, it remains in that state until the operational cycle is complete.

516

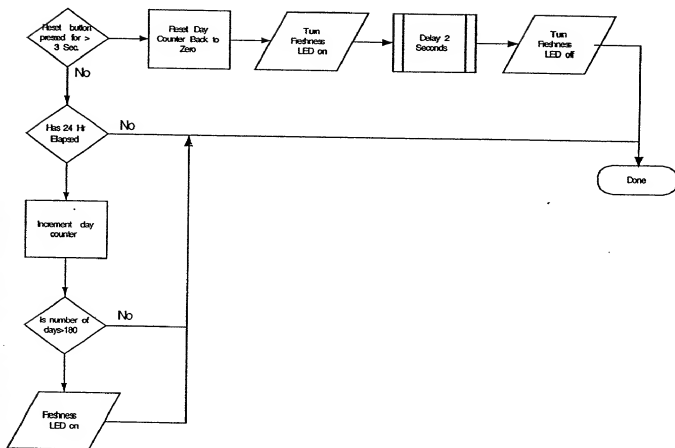


TURBO CYCLE ALGORITHM

Fig 36

518

Change Freshness Filter:

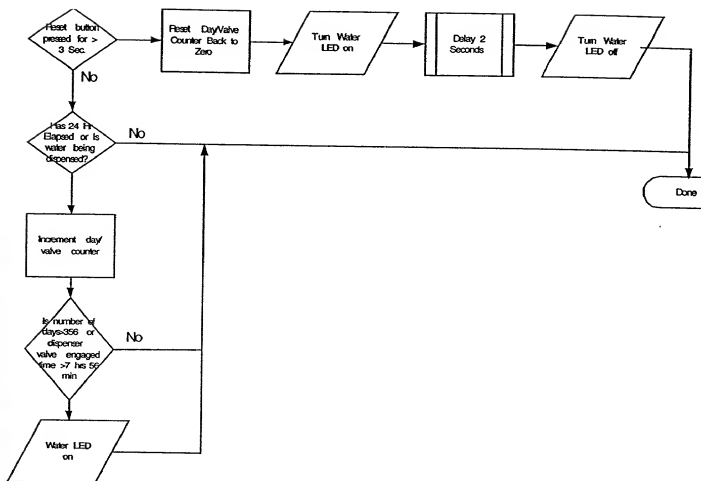


Freshness Filter Reminder Algorithm

Fig 37

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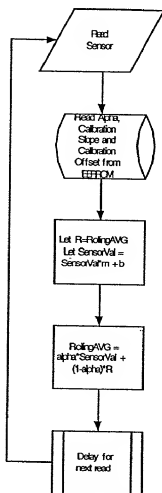
520



Water Filter Reminder Algorithm

Fig 38

522

SENSOR READ AND ROLLING AVERAGE ALGO:**Sensor Reading Algorithm****NOTE:**

Fresh food average uses this algorithm twice to create a 2nd pole filter.

Fig 39

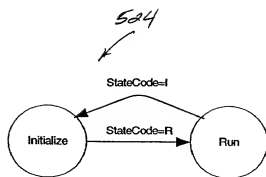


Fig. 40

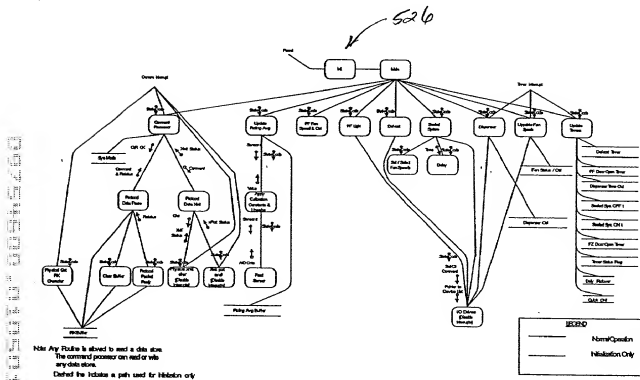
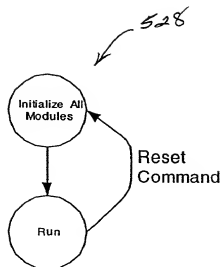


Fig. 41



STATE DIAGRAM FOR MAIN CONTROL
Fig. 42

HMI MAIN STATE MACHINE

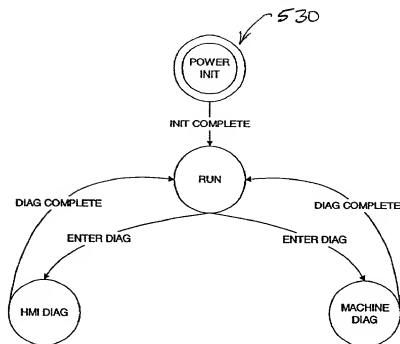
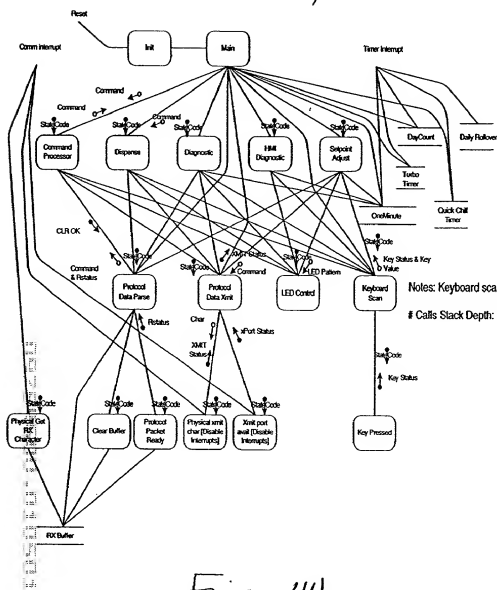


Fig. 43

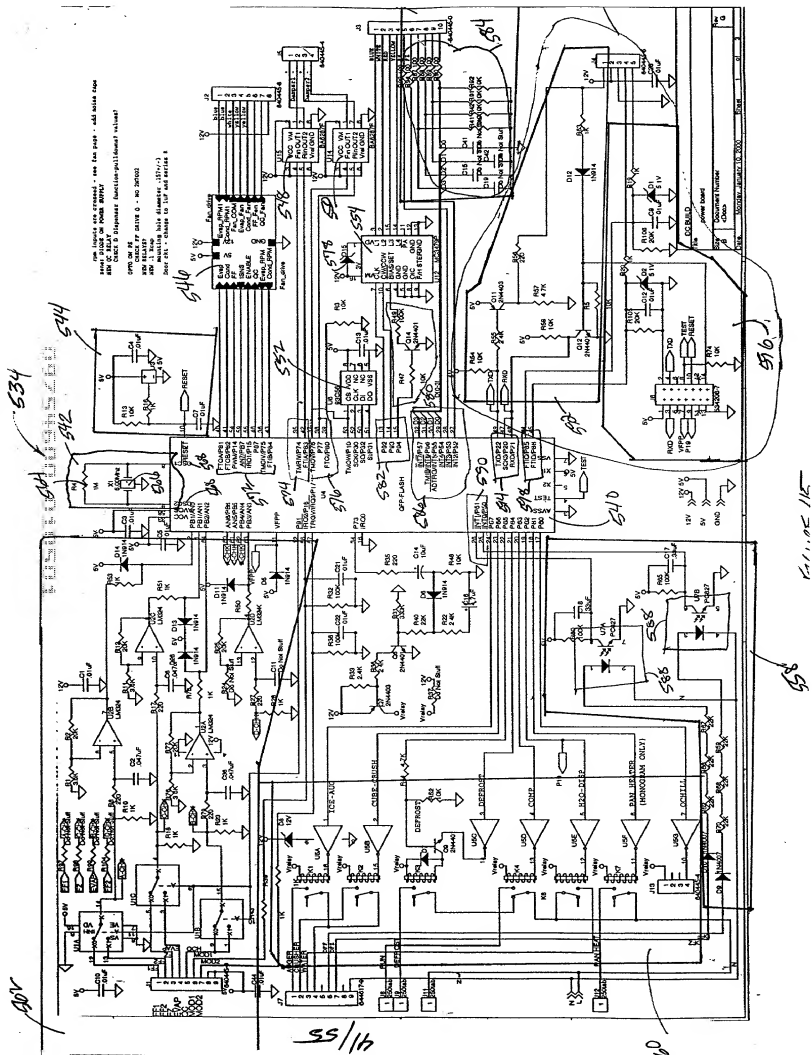
HMI Structure

HMI Structure



Notes: Keyboard scan should return the last key hit and whether a key is presently being pressed.

```
# Calls Slack Depth: Main->Diag->Keyboardscan-> KeyPressed->Com Interrupt ->
Physical get character
```

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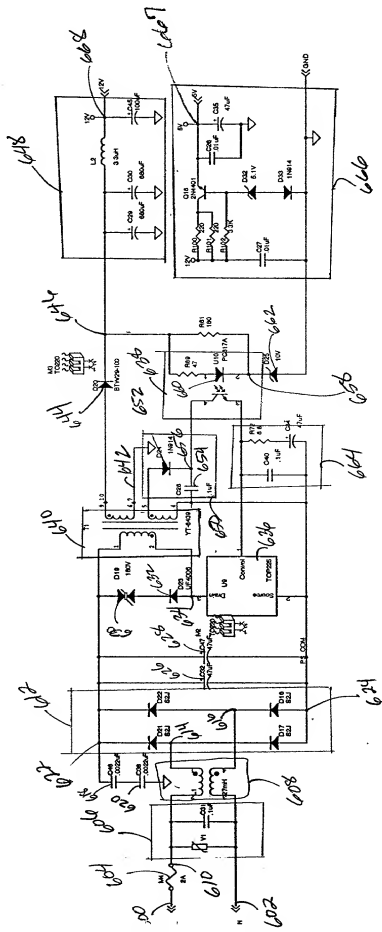
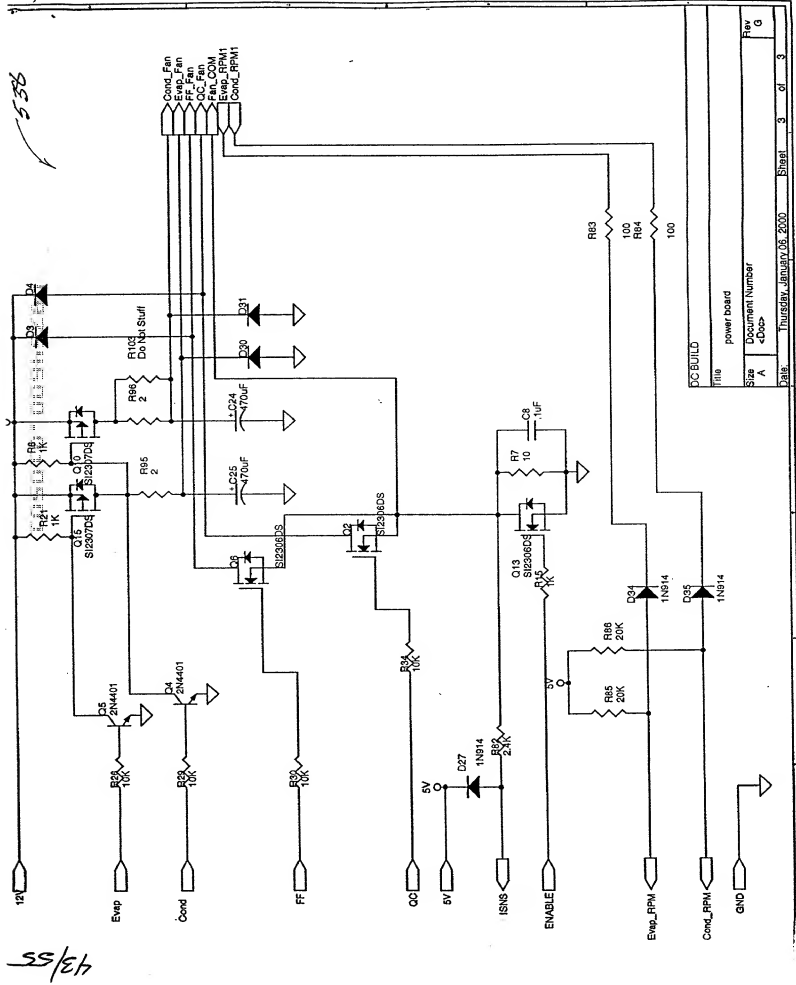
[illegible]

FIGURE 45-

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DC BUILD			
Title power board			
Size	Document Number	Rev	
A	4000	G	
Date	Thursday, January 05, 2020	Sheet	3 of 3

4/3/SS

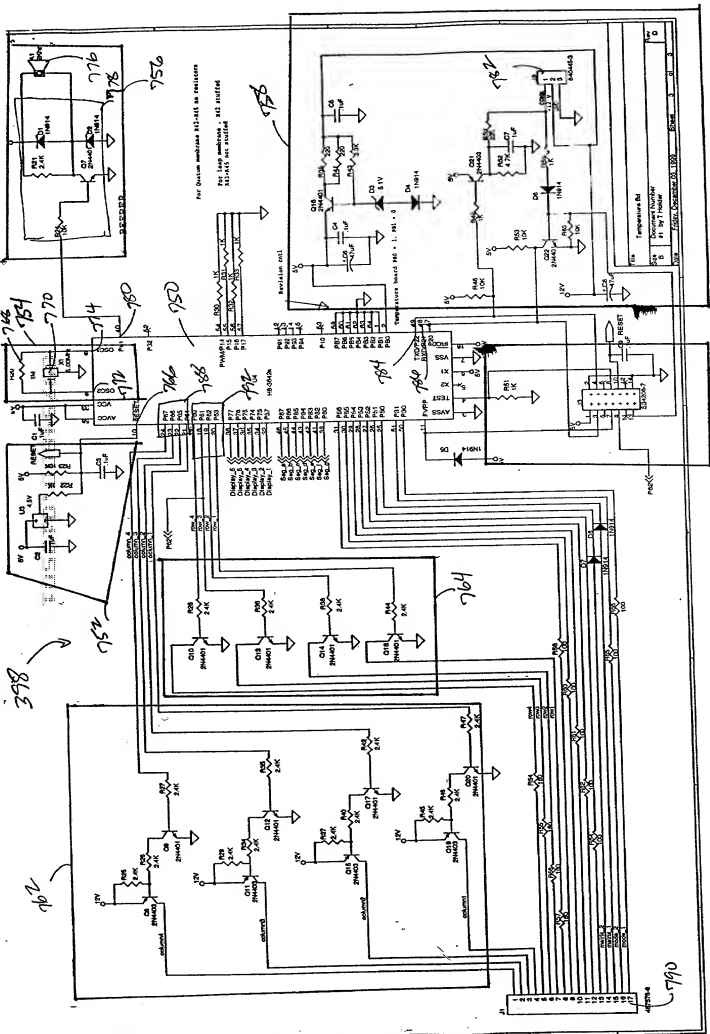
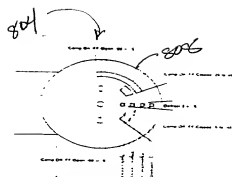


FIGURE 47

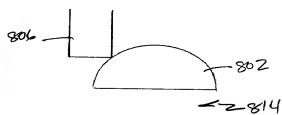
800



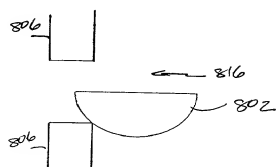
Contact Construct



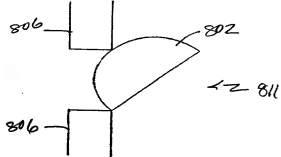
Defrost — 810



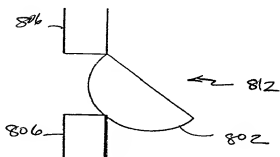
Compressor On / FF Open



Compressor Off / FF Open



Compressor On / FF Closed



Compressor Off / FF Closed

FIG. 48

820

820

822

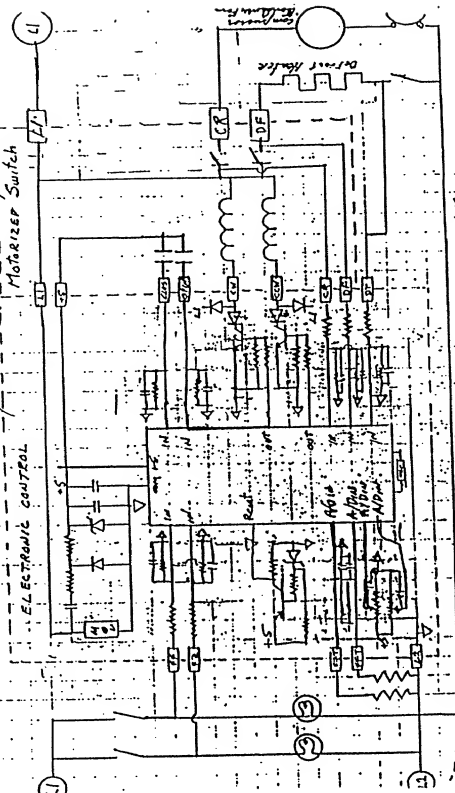


FIG. 49

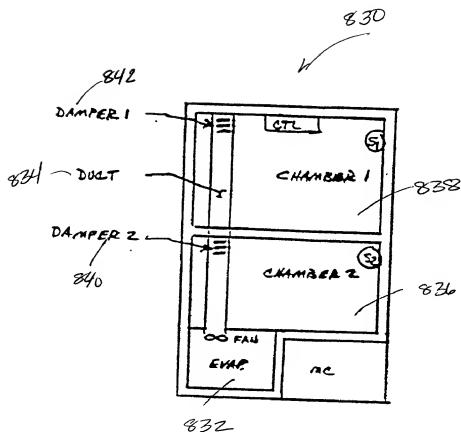


FIG. 50

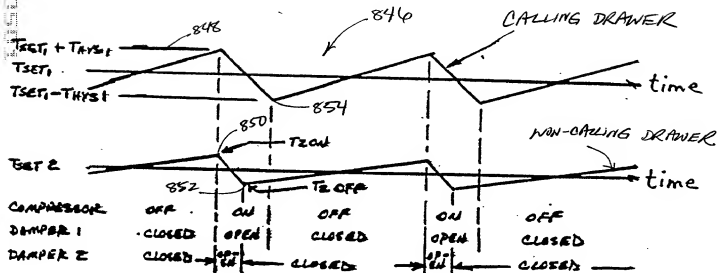
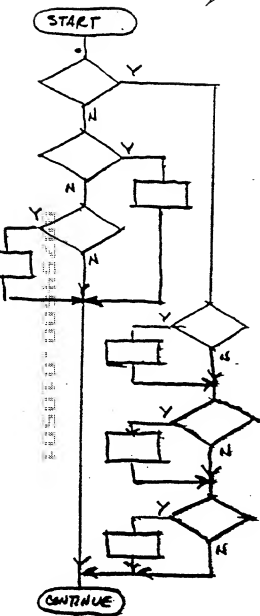


FIG. 51

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COMPRESSOR ON ?

TEMP CHAMB1 \geq TSET1 + THYS1 ?

COMPRESSOR & FANS \rightarrow ON
 STORE TEMP OF CHAMB2 AS T2 ON
 CALC. T2 OFF = T2 SET - (T2 ON - T2 SET)
 SET T1 OFF = T1 SET - T1 HYS

TEMP CHAMB2 \geq TSET2 + THYS2 ?

COMPRESSOR & FANS \rightarrow ON
 STORE TEMP CHAMB1 AS T1 ON
 CALC. T1 OFF = T1 SET - (T1 ON - T1 SET)
 SET T2 OFF = T2 SET - T2 HYS

TEMP CHAMB1 \leq T1 OFF ?

CLOSE DAMPER 1

TEMP CHAMB2 \leq T2 OFF ?

CLOSE DAMPER 2

ALL DAMPERS CLOSED ?

TURN OFF COMPRESSOR & FANS

FIG. 52

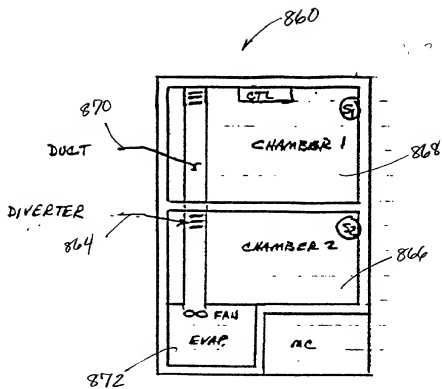


FIG. 55

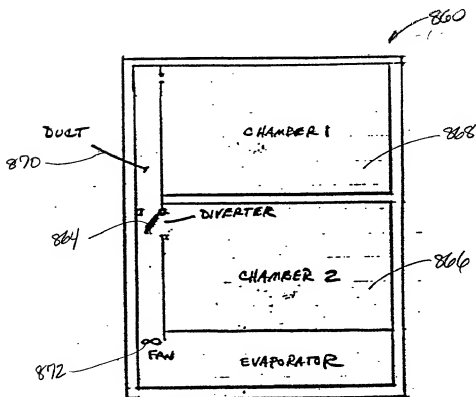


FIG. 56

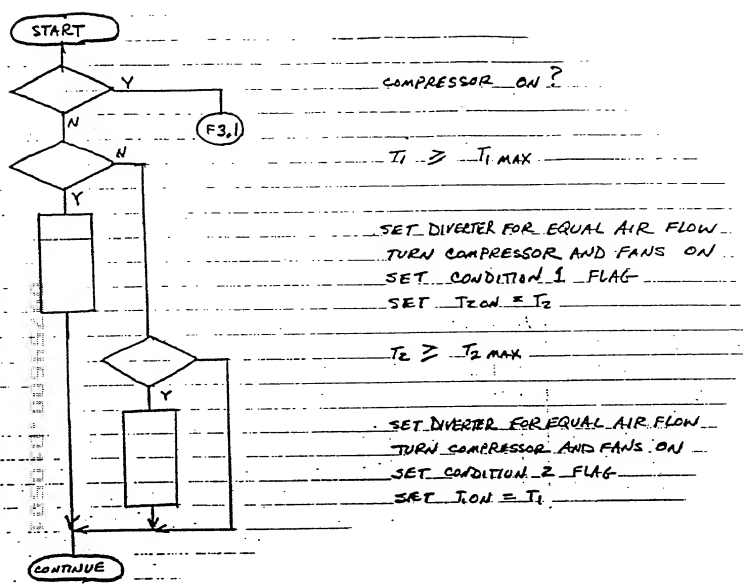


FIG. 57

